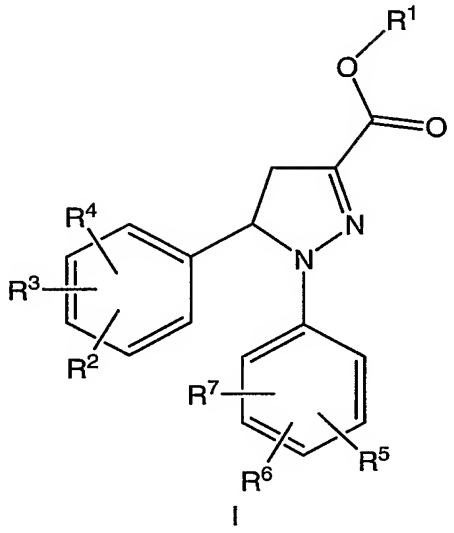
Claims:

1. Substituted pyrazoline compounds of general formula I,



I

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^8, SH, SR^8, SOR^8, SO_2R^8, NH_2, NHR^8, NR^8R^9, -(C=O)-NH_2, -(C=O)-NHR^8 or -(C=O)-NR^8R^9 whereby R^8 and R^9 for each substituent independently represent linear or branched C_{1-6} alkyl,

R^5 and R^6 independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^{10}, SH, SR^{10}, SOR^{10}, NH_2, NHR^{10}, $NR^{10}R^{11}$, -(C=O)-NH_2, -(C=O)-NHR^{10} and -(C=O)-$NR^{10}R^{11}$, whereby R^{10} and optionally R^{11} for each substituent independently represent linear or branched C_{1-6} alkyl;

R^7 represents hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^{10}, SH, SR^{10}, SOR^{10}, NH_2, NHR^{10}, $NR^{10}R^{11}$, -(C=O)-NH_2, -(C=O)-NHR^{10} and -(C=O)-$NR^{10}R^{11}$, whereby R^{10} and optionally R^{11} for each substituent independently represent linear or branched C_{1-6} alkyl;

with the proviso that
if R^1 and R^7 are H and R^5 and R^6 both represent Cl in the 3- and 4-position of the phenyl ring neither of R^2, R^3 and R^4 may represent F in the 4-position of the phenyl ring if the other two of R^2, R^3 and R^4 both represent H;

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

2. Compounds according to claim 1, characterized in that at least one of R^2, R^3 or R^4 represents hydrogen, while at least one of R^2, R^3 or R^4 is different from hydrogen.

3. Compounds according to any one of claims 1 or 2, characterized in that R^7 represents hydrogen.

4. Compounds according to any one of claims 1 to 3, characterized in that R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^2, R^3 and R^4 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

5. Compounds according to any one of claims 1 to 4, characterized in that R^5 and R^6 independently of each other represent a linear or branched C_{1-6}-alkyl group,

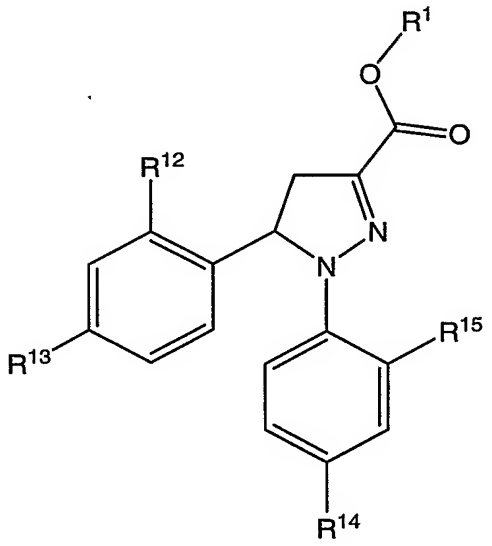
a halogen atom, or CF_3, preferably R^5 and R^6 independently of each other represent methyl, ethyl, F, Cl, Br and CF_3.

6. Compounds according to any one of claims 1 to 5, characterized in that R^2 represents a chlorine atom in the 4-position of the phenyl ring, while R^3 and R^4 represent hydrogen.

7. Compounds according to any one of claims 1 to 6, characterized in that R^5 and R^6 each represent a chlorine atoms in the 2- and 4-position of the phenyl ring, while R^7 represents hydrogen.

8. Compounds according to any one of claims 1 to 7, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

9. Compounds of general formula II according to one or more of claims 1 to 8



II

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^{12} or R^{13} independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, SH, NH_2, hydrogen, methyl, ethyl, F, Cl, Br and CF_3,

R^{14} or R^{15} independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, SH, NH_2, methyl, ethyl, F, Cl, Br and CF_3,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

10. Compounds according to claim 9 characterized in that R^{12} and R^{13} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{12} and R^{13} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

11. Compounds according to any one of claims 9 or 10, characterized in that R^{14}, and R^{15} independently of each other represent a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{14} and R^{15} independently of each other represent methyl, ethyl, F, Cl, Br and CF_3.

12. Compounds according to any one of claims 9 to 11, characterized in that R^{13} represents Cl and R^{12} represents hydrogen.

13. Compounds according to any one of claims 9 to 12, characterized in that R^{14} and R^{15} each represent Cl.

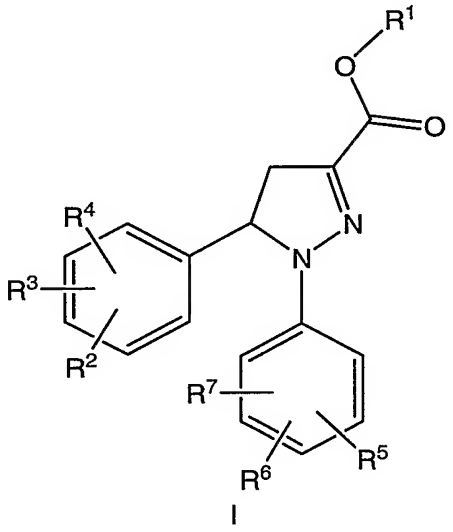
14. Compounds according to any one of claims 9 to 13, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

15. Compounds according to one or more of claims 1 to 14 selected from the group consisting of:

5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxylic acid,

optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.

16. Combination of compounds comprising at least one substituted pyrazoline compound of general formula I



I

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

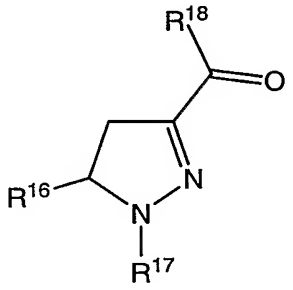
R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^8, SH, SR^8, SOR^8, SO_2R^8, NH_2, NHR^8, NR^8R^9, -(C=O)-NH_2, -(C=O)-NHR^8 or -(C=O)-NR^8R^9 whereby R^8

and R^9 for each substituent independently represent linear or branched C_{1-6} alkyl,

R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^{10}, SH, SR^{10}, SOR^{10}, NH_2, NHR^{10}, $NR^{10}R^{11}$, -(C=O)-NH_2, -(C=O)-NHR^{10} and -(C=O)-$NR^{10}R^{11}$, whereby R^{10} and optionally R^{11} for each substituent independently represent linear or branched C_{1-6} alkyl;

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof;

and at least one substituted pyrazoline compound of general formula X



X

wherein

R^{16} represents an optionally at least mono-substituted phenyl group,

R^{17} represents an optionally at least mono-substituted phenyl group,

R^{18} represents a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least mono-substituted aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an –$NR^{19}R^{20}$-moiety,

R^{19} and R^{20}, identical or different, represent a hydrogen atom, an unbranched or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic radical, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least mono-substituted aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system and/or bonded via a linear or branched alkylene group, an –SO_2-R^{21}-moiety, or an –$NR^{22}R^{23}$-moiety, with the proviso that R^{19} and R^{20} do not identically represent hydrogen,

R^{21} represents a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing cycloaliphatic group, which may be condensed with a mono- or polycyclic ring-system, or an optionally at least mono-substituted aryl or heteroaryl group, which may be condensed with a mono- or polycyclic ring system and/or bonded via a linear or branched alkylene group,

R^{22} and R^{23}, identical or different, represent a hydrogen atom, an unbranched or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic radical, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least

mono-substituted aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system and/or bonded via a linear or branched alkylene group,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

17. Combination of compounds according to claim 16, characterized in that at least one of R^2, R^3 or R^4 represents hydrogen, while at least one of R^2, R^3 or R^4 is different from hydrogen.

18. Combination of compounds according to any one of claims 16 or 17, characterized in that at least on of R^5, R^6 or R^7 represents hydrogen, while at least one R^5, R^6 or R^7 is different from hydrogen.

19. Combination of compounds according to any one of claims 16 to 18, characterized in that R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^2, R^3 and R^4 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

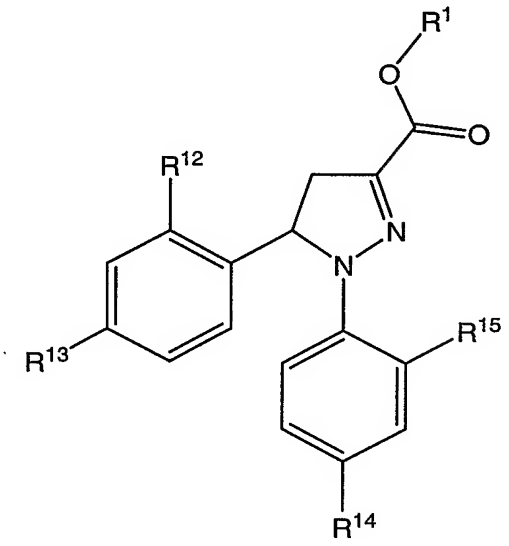
20. Combination of compounds according to any one of claims 16 to 19, characterized in that R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^5, R^6 and R^7 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

21. Combination of compounds according to any one of claims 16 to 20, characterized in that R^2 represents a chlorine atom in the 4-position of the phenyl ring, while R^3 and R^4 represent hydrogen.

22. Combination of compounds according to any one of claims 16 to 21, characterized in that R^5 and R^6 each represent a chlorine atoms in the 2- and 4-position of the phenyl ring, while R^7 represents hydrogen.

23. Combination of compounds according to any one of claims 16 to 22, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

24. Combination of compounds according to any one of claims 16 to 23 characterized in that the compound of general formula I is represented by a compound of general formula II



II

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^{12}, R^{13}, R^{14} or R^{15} independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, SH, NH_2, hydrogen, methyl, ethyl, F, Cl, Br and CF_3,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

25. Combination of compounds according to claim 24 characterized in that R^{12} and R^{13} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{12} and R^{13} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

26. Combination of compounds according to any one of claims 24 or 25, characterized in that R^{14}, and R^{15} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{14} and R^{15} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

27. Combination of compounds according to any one of claims 24 to 26, characterized in that R^{13} represents Cl and R^{12} represents hydrogen.

28. Combination of compounds according to any one of claims 24 to 27, characterized in that R^{14} and R^{15} each represent Cl.

29. Combination of compounds according to any one of claims 24 to 28, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

30. Combination of compounds according to one or more of claims 16 to 29 characterized in that the compound according to formula I or II selected from the group consisting of:

5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxylic acid,

optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.

31. Combination of compounds according to any of claims 16 to 30, characterized in that R^{16} represents a phenyl group, which is optionally substituted by one or more substituents independently selected from the group consisting of a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R', SH, SR', SOR', SO_2R', NH_2, NHR', NR'R", -(C=O)-NH_2, -(C=O)-NHR' and -(C=O)-NR'R" whereby R' and R" for each substituent independently represent linear or branched C_{1-6} alkyl, preferably R^{16} represents a phenyl group, which is optionally substituted by one or more substituents selected from the group consisting of methyl, ethyl, F, Cl, Br and CF_3, more preferably R^{16} represents a phenyl group, which is mono-substituted with a chlorine atom in the 4-position.

32. Combination of compounds according to any of claims 16 to 31, characterized in that R^{17} represents a phenyl group, which is optionally substituted by one or more substituents independently selected from the group consisting of a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R', SH, SR', SOR', SO_2R', NH_2, NHR', NR'R", -(C=O)-NH_2, -(C=O)-NHR' and -(C=O)-NR'R", whereby R' and optionally R" for each substituent independently represent linear or branched C_{1-6} alkyl, preferably R^{17} represents a phenyl group, which is optionally substituted by one or more substituents independently selected from the group consisting of methyl, ethyl, F, Cl, Br and CF_3, more preferably R^{17} represents a phenyl group, which is di-substituted with two chlorine atoms in its 2- and 4-position.

33. Combination of compounds according to one or more of claims 16 to 32, characterized in that R^{18} represents a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing C_{3-8} cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an

optionally at least mono-substituted, 5- or 6-membered aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an $-NR^{19}R^{20}$-moiety, preferably R^{18} represents a saturated, optionally at least mono-substituted, optionally one or more nitrogen-atoms as ring member containing C_{3-8} cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an $-NR^{19}R^{20}$-moiety, more preferably R^{18} represents a pyrrolidinyl group, a piperidinyl group or a piperazinyl group, whereby each of these groups may be substituted with one or more C_{1-6}-alkyl groups, or an $-NR^{18}R^{19}$-moiety.

34. Combination of compounds according to one or more of claims 16-33, characterized in that R^{19} and R^{20}, identical or different, represent a hydrogen atom, an unbranched or branched, saturated or unsaturated, optionally at least mono-substituted C_{1-6}-aliphatic radical, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing C_{3-8}-cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least mono-substituted, 5- or 6-membered aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system and/or bonded via a methylene ($-CH_2-$) or ethylene ($-CH_2-CH_2$)-group, an $-SO_2-R^{21}$-moiety, or an $-NR^{22}R^{23}$-moiety, preferably one of these residues R^{19} and R^{20} represents a hydrogen atom and the other one of these residues R^{19} and R^{20} represents a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing C_{3-8}-cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least mono-substituted, 5- or 6-membered aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, an $-SO_2-R^{21}$-moiety, or an $-NR^{22}R^{23}$-moiety, or R^{19} and R^{20}, identical or different, each represent a C_{1-6} alkyl group, more preferably one of these residues R^{19} and R^{20} represents a hydrogen atom and the other one of these residues R^{19} and R^{20} represents an optionally at least mono-substituted pyrrolidinyl group, an optionally at least

mono-substituted piperidinyl group, an optionally at least mono-substituted piperazinyl group, an optionally at least mono-substituted triazolyl group, an –SO_2-R^{21}-moiety, or an –$NR^{22}R^{23}$-moiety, or R^{19} and R^{20}, identical or different, represent a methyl group, an ethyl group, an n-propyl group, an isopropyl group, an n-butyl group, a sec-butyl group or a tert.-butyl group.

35. Combination of compounds according to one or more of claims 16-34, characterized in that R^{21} represents a linear or branched, saturated or unsaturated, optionally at least mono-substituted C_{1-6} aliphatic group, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing C_{3-8} cycloaliphatic group, which may be condensed with a mono- or polycyclic ring-system, or an optionally at least mono-substituted, 5- or 6-membered aryl or heteroaryl group, which may be condensed with a mono- or polycyclic ring system and/or bonded via a methylene (-CH_2-) or ethylene (-CH_2-CH_2)-group, preferably R^{21} represents a C_{1-6}-alkyl group, a saturated, optionally at least mono-substituted cycloaliphatic group, which may be condensed with a mono- or polycyclic ring-system, or a phenyl group, which is optionally substituted with one or more C_{1-6} alkyl groups.

36. Combination of compounds according to one or more of claims 16-35, characterized in that R^{22} and R^{23}, identical or different, represent a hydrogen atom, an unbranched or branched, saturated or unsaturated, optionally at least mono-substituted C_{1-6} aliphatic radical, a saturated or unsaturated, optionally at least mono-substituted, optionally at least one heteroatom as ring member containing C_{3-8} cycloaliphatic group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system, or an optionally at least mono-substituted, 5- or 6 membered aryl or heteroaryl group, which may be condensed with an optionally at least mono-substituted mono- or polycyclic ring system and/or bonded via a methylene (-CH_2-) or ethylene (-CH_2-CH_2)-group, preferably R^{22} and R^{23}, identical or different, represent a hydrogen atom or a C_{1-6} alkyl radical.

37. Combination of compounds according to any of claims 16 to 36 characterized in that the compound according to general formula X is represented by a structure wherein

R^{16} represents a phenyl ring, which is mono-substituted with a halogen atom, preferably a chlorine atom, in its 4-position,

R^{17} represents a phenyl ring, which is di-substituted with two halogen atoms, preferably chlorine atoms, in its 2- and 4-position,

R^{18} represents a pyrrolidinyl group, a piperidinyl group, a piperazinyl group, a homo-piperazinyl group, a morpholinyl group, or an $-NR^{19}R^{20}$-moiety,

R^{19} represents a hydrogen atom or a linear or branched C_{1-6}-alkyl group,

R^{20} represents a linear or branched C_{1-6} alkyl group, an $-SO_2-R^{21}$-moiety, a pyrrolidinyl group, a piperidinyl group, a piperazinyl group, a homo-piperazinyl group, a morpholinyl group, a triazolyl group, whereby each of the heterocyclic rings may be substituted with one or more, identical or different, C_{1-6}-alkyl groups, and

R^{21} represents a phenyl group, which is optionally substituted with one or more C_{1-6} alkyl groups, which may be identical or different,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

38. Combination of compounds according to one or more of claims 16 to 37, characterized in that it comprises at least one compound according to formula X selected from the group consisting of:

N-piperidinyl-5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxamide,

5-(4-Chloro-phenyl)-1-(2,4-dichloro-phenyl)-4,5-dihydro-1H-pyrazole-3-carboxylic acid-[1,2,4]-triazole-4-yl-amide,

5-(4-Chloro-phenyl)-1-(2,4-dichloro-phenyl)-4,5-dihydro-1H-pyrazole-3-carboxylic acid-(4-methyl-piperazin-1-yl)-amide,

5-(4-Chloro-phenyl)-1-(2,4-dichloro-phenyl)-4,5-dihydro-1H-pyrazole-3-carboxylic acid diethylamide,

[5-(4-Chloro-phenyl)-1-(2,4-dichloro-phenyl)-4,5-dihydro-1H-pyrazole-3-yl]-piperidine-1-yl-methanone,

N-[5-(4-Chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazole-3-carbonyl]-4-methylphenylsulfonamide,

optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.

39. Combination of compounds according to one or more of claims 16 to 38, characterized in that it comprises at least

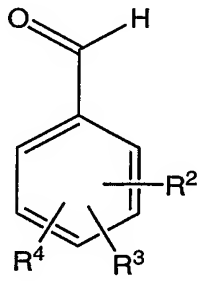
5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxylic acid,

and

N-piperidinyl-5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxamide;

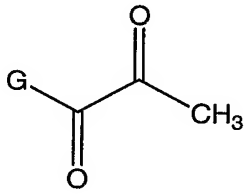
each optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.

40. Process for the manufacture of substituted pyrazoline compounds of general formula I or II, wherein R1 is hydrogen, according to one or more of claims 1 to 15, characterized in that at least one benzaldehyde compound of general formula III



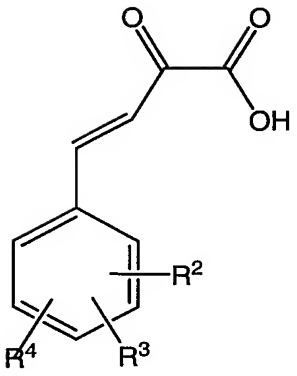
(III)

wherein R^2, R^3 and R^4 have the meaning according to one or more of claims 1-8, is reacted with a pyruvate compound of general formula (IV)



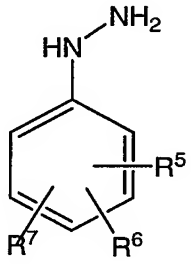
(IV),

wherein G represents an OR group with R being a branched or unbranched C_{1-6} alkyl radical or G represents an O^-K group with K being a cation,to yield a compound of general formula (V)



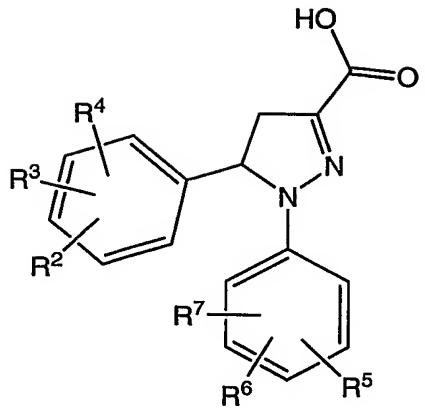
(V)

which is optionally isolated and/or optionally purified, and which is reacted with an optionally substituted phenyl hydrazine of general formula (VI)



(VI)

or a corresponding salt thereof, wherein R^5, R^6 and R^7 have the meaning according to one or more of claims 1-8, under inert atmosphere, to yield a compound of general formula (VII)

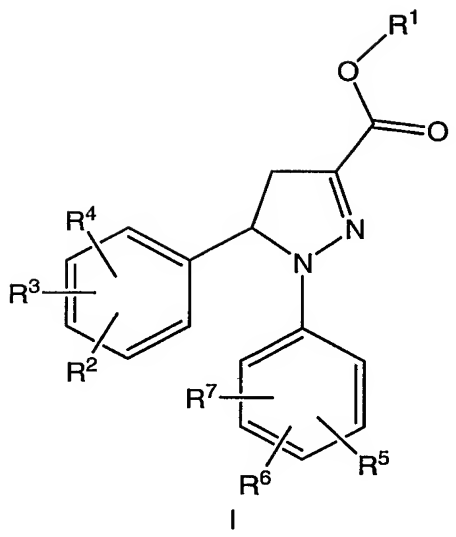


(VII)

wherein R^2, R^3, R^4, R^5, R^6 and R^7 have the meaning as given above, which is optionally isolated and/or optionally purified, and optionally esterified to an alkyl-ester if in the substituted pyrazoline compound of general formula I according to one or more of claims 1 to 15 R^1 is a linear or branched C_{1-4}-alkyl group.

41. Medicament comprising at least one substituted pyrazoline compound of general formula I or II according to one or more of claims 1 to 15, and optionally one or more pharmaceutically acceptable excipients.

42. Medicament comprising at least one substituted pyrazoline compound of general formula I



I

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^8, SH, SR^8, SOR^8, SO_2R^8, NH_2, NHR^8, NR^8R^9, -(C=O)-NH_2, -(C=O)-NHR^8 or -(C=O)-NR^8R^9 whereby R^8 and R^9 for each substituent independently represent linear or branched C_{1-6} alkyl,

R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^{10}, SH, SR^{10}, SOR^{10}, NH_2, NHR^{10}, $NR^{10}R^{11}$, -(C=O)-NH_2, -(C=O)-NHR^{10} and -(C=O)-$NR^{10}R^{11}$, whereby R^{10} and optionally R^{11} for each substituent independently represent linear or branched C_{1-6} alkyl;

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the

stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof;

and optionally one or more pharmaceutically acceptable excipients.

43. Medicament according to claim 42, characterized in that at least one of R^2, R^3 or R^4 represents hydrogen, while at least one of R^2, R^3 or R^4 is different from hydrogen.

44. Medicament according to any one of claims 42 or 43, characterized in that at least on of R^5, R^6 or R^7 represents hydrogen, while at least one R^5, R^6 or R^7 is different from hydrogen.

45. Medicament according to any one of claims 42 to 44, characterized in that R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^2, R^3 and R^4 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

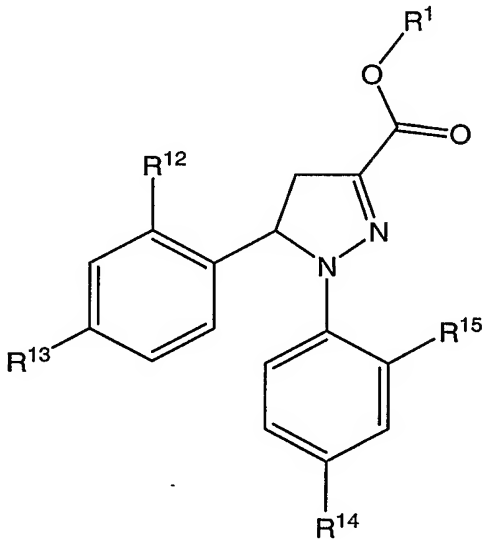
46. Medicament according to any one of claims 42 to 45, characterized in that R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^5, R^6 and R^7 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

47. Medicament according to any one of claims 42 to 46, characterized in that R^2 represents a chlorine atom in the 4-position of the phenyl ring, while R^3 and R^4 represent hydrogen.

48. Medicament according to any one of claims 42 to 47, characterized in that R^5 and R^6 each represent a chlorine atoms in the 2- and 4-position of the phenyl ring, while R^7 represents hydrogen.

49. Medicament according to any one of claims 42 to 48, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

50. Medicament according to one or more of claims 42 to 49 characterized in that the compound of general formula (I) is represented by a compound of general formula (II)



II

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^{12}, R^{13}, R^{14} or R^{15} independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, SH, NH_2, hydrogen, methyl, ethyl, F, Cl, Br and CF_3,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing

ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

51. Medicament according to claim 50 characterized in that R^{12} and R^{13} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{12} and R^{13} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

52. Medicament according to any one of claims 50 or 51, characterized in that R^{14}, and R^{15} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{14} and R^{15} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

53. Medicament according to any one of claims 50 to 52, characterized in that R^{13} represents Cl and R^{12} represents hydrogen.

54. Medicament according to any one of claims 50 to 53, characterized in that R^{14} and R^{15} each represent Cl.

55. Medicament according to any one of claims 50 to 54, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

56. Medicament according to one or more of claims 42 to 55 characterized in that the compound according to formulas I or II is selected from the group consisting of:

5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxylic acid,

optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.

57. Medicament comprising at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients.

58. Medicament according to claim 42 to 57 for the regulation of triglyceride levels in the blood plasma and for the prophylaxis and/or treatment of disorders of the central nervous system, especially stroke, of disorders of the cardiovascular system and of of food intake disorders, preferably bulimia, anorexia, cachexia, obesity, type II diabetus mellitus (non-insuline dependent diabetes mellitus), preferably obesity and diabetis.

59. Medicament according to one or more of claims 42 to 56 for the prophylaxis and/or treatment of disorders of the central nervous system, disorders of the immune system, disorders of the cardiovascular system, disorders of the endocrinous system, disorders of the respiratory system, disorders of the gastrointestinal tract or reproductive disorders.

60. Medicament according to claim 57 for the modulation of cannabinoid-receptors, preferably cannabinoid 1 (CB_1) receptors, for the prophylaxis and/or treatment of disorders of the central nervous system, disorders of the immune system, disorders of the cardiovascular system, disorders of the endocrinous system, disorders of the respiratory system, disorders of the gastrointestinal tract or reproductive disorders.

61. Medicament according to one or more of claims 42 to 57 for the prophylaxis and/or treatment of food intake disorders, preferably bulimia, anorexia, cachexia, obesity, type II diabetus mellitus (non-insuline dependent diabetes mellitus), preferably obesity.

62. Medicament according to one or more of claims 42 to 57 for the prophylaxis and/or treatment of psychosis.

63. Medicament according to one or more of claims 42 to 57 for the prophylaxis and/or treatment of alcohol abuse and/or addiction, nicotine abuse and/or

addiction, drug abuse and/or addiction and/or medicament abuse and/or addiction, preferably drug abuse and/or addiction and/or nicotine abuse and/or addiction.

64. Medicament according to one or more of claims 42 to 57 for the prophylaxis and/or treatment of one or more disorders selected from the group consisting of schizophrenia, anxiety, depression, epilepsy, neurodegenerative disorders, cerebellar disorders, spinocerebellar disorders, cognitive disorders, cranial trauma, panic attacks, peripheric neuropathy, glaucoma, migraine, Morbus Parkinson, Morbus Huntington, Morbus Alzheimer, Raynaud's disease, tremblement disorders, compulsive disorders, senile dementia, thymic disorders, tardive dyskinesia, bipolar disorders; bone disorders including osteoporosis or Paget's disease of bone; cancer, preferably for the prophylaxis and/or treatment of one or more types of cancer selected from the group consisting of brain cancer, bone cancer, lip cancer, mouth cancer, esophageal cancer, stomach cancer, liver cancer, bladder cancer, pancreas cancer, ovary cancer, cervical cancer, lung cancer, breast cancer, skin camcer, colon cancer, bowl cancer and prostate cancer, more preferably for the prophylaxis and/or treatment of one or more types of cancer selected from the group consisting of colcon cancer, bowel cancer and prostate cancer; medicament-induced movement disorders, dystonia, endotoxemic shock, hemorragic shock, hypotension, insomnia, immunologic disorders, sclerotic plaques, vomiting, diarrhea, asthma, memory disorders, pruritus, pain, or for potentiation of the analgesic effect of narcotic and non-narcotic analgesics, or for influencing intestinal transit.

65. Use of at least one substituted pyrazoline compound according to one or more of claims 1 - 15 or at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the regulation of triglyceride levels in the blood plasma and for the prophylaxis and/or treatment of disorders of disorders of the central nervous system, especially stroke, of disorders of the cardiovascular system and of food intake disorders, especially

bulimia, anorexia, cachexia, obesity, type II diabetus mellitus (non-insuline dependent diabetes mellitus), preferably obesity and diabetis.

66. Use of at least one substituted pyrazoline compound according to one or more of claims 1 - 15 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the prophylaxis and/or treatment of disorders of the central nervous system, disorders of the immune system, disorders of the cardiovascular system, disorders of the endocrinous system, disorders of the respiratory system, disorders of the gastrointestinal tract or reproductive disorders.

67. Use of at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the modulation of cannabinoid-receptors, preferably cannabinoid 1 (CB_1) receptors, for the prophylaxis and/or treatment of disorders of the central nervous system, disorders of the immune system, disorders of the cardiovascular system, disorders of the endocrinous system, disorders of the respiratory system, disorders of the gastrointestinal tract or reproductive disorders.

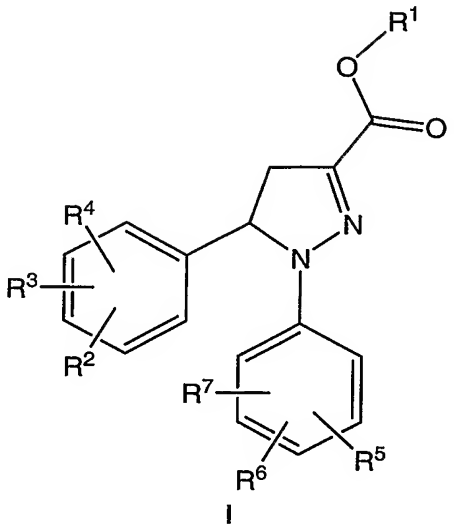
68. Use of at least one substituted pyrazoline compound according to one or more of claims 1-15 or at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the prophylaxis and/or treatment of food intake disorders, preferably bulimia, anorexia, cachexia, obesity, type II diabetus mellitus (non-insuline dependent diabetes mellitus), preferably obesity.

69. Use of at least one substituted pyrazoline compound according to one or more of claims 1-15 or at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the prophylaxis and/or treatment of psychosis.

70. Use of at least one substituted pyrazoline compound according to one or more of claims 1-15 or at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the prophylaxis and/or treatment of alcohol abuse and/or addiction, nicotine abuse and/or addiction, medicament abuse and/or addiction and/or drug abuse and/or addiction, preferably drug abuse and/or addiction or nicotine abuse and/or addiction.

71. Use of at least one substituted pyrazoline compound according to one or more of claims 1-15 or at least one combination of compounds according to one or more of claims 16 to 39 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the prophylaxis and/or treatment of one or more disorders selected from the group consisting of schizophrenia, anxiety, depression, epilepsy, neurodegenerative disorders, cerebellar disorders, spinocerebellar disorders, cognitive disorders, cranial trauma, panic attacks, peripheric neuropathy, glaucoma, migraine, Morbus Parkinson, Morbus Huntington, Morbus Alzheimer, Raynaud's disease, tremblement disorders, compulsive disorders, senile dementia, thymic disorders, tardive dyskinesia, bipolar disorders; bone disorders including osteoporosis or Paget's disease of bone; cancer, preferably for the prophylaxis and/or treatment of one or more types of cancer selected from the group consisting of brain cancer, bone cancer, lip cancer, mouth cancer, esophageal cancer, stomach cancer, liver cancer, bladder cancer, pancreas cancer, ovary cancer, cervical cancer, lung cancer, breast cancer, skin camcer, colon cancer, bowl cancer and prostate cancer, more preferably for the prophylaxis and/or treatment of one or more types of cancer selected from the group consisting of colcon cancer, bowel cancer and prostate cancer; medicament-induced movement disorders, dystonia, endotoxemic shock, hemorragic shock, hypotension, insomnia, immunologic disorders, sclerotic plaques, vomiting, diarrhea, asthma, memory disorders, pruritus, pain, or for potentiation of the analgesic effect of narcotic and non-narcotic analgesics, or for influencing intestinal transit.

72. Use of at least one substituted pyrazoline compound of general formula I



I

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^8, SH, SR^8, SOR^8, SO_2R^8, NH_2, NHR^8, NR^8R^9, -(C=O)-NH_2, -(C=O)-NHR^8 or -(C=O)-NR^8R^9 whereby R^8 and R^9 for each substituent independently represent linear or branched C_{1-6} alkyl,

R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, -(C=O)-R^{10}, SH, SR^{10}, SOR^{10}, NH_2, NHR^{10}, $NR^{10}R^{11}$, -(C=O)-NH_2, -(C=O)-NHR^{10} and -(C=O)-$NR^{10}R^{11}$, whereby R^{10} and optionally R^{11} for each substituent independently represent linear or branched C_{1-6} alkyl;

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof;
and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the regulation of triglyceride levels in the blood plasma and for the prophylaxis and/or treatment of disorders of disorders of the central nervous system, especially stroke, of disorders of the cardiovascular system and of food intake disorders, especially bulimia, anorexia, cachexia, obesity, type II diabetus mellitus (non-insuline dependent diabetes mellitus), preferably obesity and diabetis.

73. Use according to claim 72, characterized in that at least one of R^2, R^3 or R^4 represents hydrogen, while at least one of R^2, R^3 or R^4 is different from hydrogen.

74. Use according to any one of claims 72 or 73, characterized in that at least on of R^5, R^6 or R^7 represents hydrogen, while at least one R^5, R^6 or R^7 is different from hydrogen.

75. Use according to any one of claims 72 to 74, characterized in that R^2, R^3 and R^4 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^2, R^3 and R^4 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

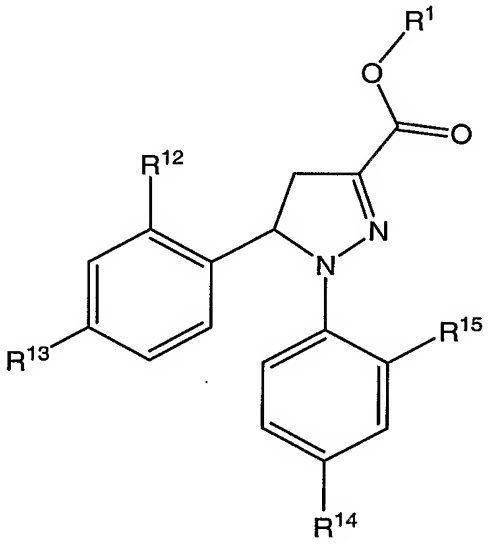
76. Use according to any one of claims 72 to 75, characterized in that R^5, R^6 and R^7 independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^5, R^6 and R^7 independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

77. Use according to any one of claims 72 to 76, characterized in that R^2 represents a chlorine atom in the 4-position of the phenyl ring, while R^3 and R^4 represent hydrogen.

78. Use according to any one of claims 72 to 77, characterized in that R^5 and R^6 each represent a chlorine atoms in the 2- and 4-position of the phenyl ring, while R^7 represents hydrogen.

79. Use according to any one of claims 72 to 78, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

80. Use according to one or more of claims 72 to 79 characterized in that the compound of general formula (I) is represented by a compound of general formula (II)



II

wherein

R^1 represents hydrogen or a linear or branched C_{1-4}-alkyl group,

R^{12}, R^{13}, R^{14} or R^{15} independently of each other represent a linear or branched C_{1-6}-alkyl group, a linear or branched C_{1-6}-alkoxy group, a halogen atom, CH_2F, CHF_2, CF_3, CN, OH, NO_2, SH, NH_2, hydrogen, methyl, ethyl, F, Cl, Br and CF_3,

optionally in form of one of the stereoisomers, preferably enantiomers or diastereomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastereomers, in any mixing ratio, or a corresponding N-oxide thereof, or a corresponding salt thereof, or a corresponding solvate thereof.

81. Use according to claim 80 characterized in that R^{12} and R^{13} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{12} and R^{13} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

82. Use according to any one of claims 80 or 81, characterized in that R^{14}, and R^{15} independently of each other represent hydrogen, a linear or branched C_{1-6}-alkyl group, a halogen atom, or CF_3, preferably R^{14} and R^{15} independently of each other represent hydrogen, methyl, ethyl, F, Cl, Br and CF_3.

83. Use according to any one of claims 80 to 82, characterized in that R^{13} represents Cl and R^{12} represents hydrogen.

84. Use according to any one of claims 80 to 83, characterized in that R^{14} and R^{15} each represent Cl.

85. Use according to any one of claims 80 to 84, characterized in that R^1 represents hydrogen, methyl or ethyl, preferably hydrogen.

86. Use according to one or more of claims 72 to 85 characterized in that the compound according to formulas I or II is selected from the group consisting of:

5-(4-chloro-phenyl)-1-(2,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-3-carboxylic acid,

optionally in the form of a corresponding N-oxide, a corresponding salt or a corresponding solvate.